Amendments to the Claims

Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claims 1-29 (Canceled).

30. (Previously Presented) A personal active noise attenuating system comprising:
a heteronomous electronic controller and a control actuator comprising a radius of reverberation;
a first and second electro-acoustic transducer mounted on opposite sides of a head support structure;
a first actuator located adjacent to the first electro-acoustic transducer and a second actuator located adjacent to the second transducer, wherein the first and second electro-acoustic transducers define a zone of reverberation on each side of the support structure adjacent a wearer's ears, wherein the first and second electro-acoustic transducers are each adapted to be movable within said zones so as to provide an unchanging-transfer function estimate for a filtered reference which does not need to be updated, and whereby a transfer function is identified for all frequencies within the control bandwidth and thus is specified independent of the nature of the disturbance signal;
an adaptive feedforward component utilizing the transfer function estimate for the heteronomous electronic controller which is adapted to attenuate tonal noises, and
a feedback component of the heteronomous electronic controller which is adapted to attenuate broadband noises; and
a linear combiner adapted for summing a linear combination of the adaptive feedward component and the feedback component so as to generate a heteronomous control signal.

31. (Previously Presented) The system as in Claim 30, wherein the first electro-acoustic transducer comprises a first adjuster, and wherein the second electro-acoustic transducer comprises a second adjuster, and wherein the first and second adjusters are adapted to move the first and second electro-acoustic transducers within a range relative to the first

and second actuators, and wherein the transfer function remains virtually unchanged.

32. (Previously Presented) The system as in Claim 31 wherein the first and second adjusters comprise a geared system to move the first and second electro-acoustic transducers.

33. (Previously Presented) The system as in Claim 32 wherein the geared system is manually adjustable.

34. (Previously Presented) The system as in Claim 32 wherein the geared system is powered by a motor adapted to move the geared system in response to a signal from the feedback component.

35. (Previously Presented) The system as in Claim 30 wherein the first and second electro-acoustic transducers comprise a motorized adjuster adapted to calculate an optimal position of the first and second electro-acoustic transducers with respect to the noise field and to adjust a current position of the first and second transducers so as to optimize a perceived noise reduction and field of silence dimension in response to a signal from the feedback component.

36. (Previously Presented) The system as in Claim 30 wherein the adaptive feedforward component and the feedback component are linked to the first electro-acoustic transducer and the first actuator and to the second electro-acoustic transducer and the second actuator so as to minimize feedback and instabilities in the heteronomous control system.

37. (Previously Presented) The system as in Claim 30 wherein the feedback component provides feedback control to transfer function by sound pressure.

38. (Previously Presented) The system as in Claim 30 wherein an electro-acoustic output signal provides for rejection of a disturbance noise while minimizing sensitivity of the feedback component.

39. (Canceled)

40. (Previously Presented) The system as in Claim 31 wherein the transfer function is for a leaky LMS algorithm.

41-65. (Canceled).